

What Is Claimed Is:

1 1. A method for determining regression or
2 progression of cancer in a patient previously diagnosed
3 with cancer, the method comprising assaying a sample of
4 the patient previously diagnosed with cancer for current
5 level of expression of a nucleic acid molecule which
6 encodes Sp17, and comparing the current level of
7 expression to a prior level of expression of Sp17 in the
8 patient, variation therebetween indicating progression or
9 regression of the cancer.

1 2. A method for generating Sp-17-specific immune
2 effector cells ex vivo comprising:
3 pulsing antigen presenting cells with recombinant Sp-
4 17 or antigenic portions thereof; and
5 contacting the pulsed antigen presenting cells with
6 immune effector cells for a time sufficient to stimulate
7 Sp-17-reactive immune effector cells under conditions
8 permissive for proliferation of Sp17-reactive immune
9 effector cells, whereby Sp17-specific immune effector
10 cells are thereby generated.

1 3. The method of claim 2 wherein the antigen
2 presenting cells are dendritic cells.

1 4. The method of claim 2 wherein the immune
2 effector cells are cytotoxic T lymphocytes.

1 5. Ex vivo antigen presenting cells that present
2 Sp-17 antigens for class I MHC, wherein the antigen
3 presenting cells have had recombinant Sp17 or antigenic
4 portions thereof introduced into them in a manner
5 effective to antigenically present the Sp-17 antigen for

6 class I MHC.

1 6. An isolated cytotoxic T cell line which
2 specifically recognizes Sp-17.

1 7. A method of treating a subject suffering from
2 cancer characterized by cells having Sp17 on the cell
3 surface, which comprises administering to the subject an
4 effective amount of the cytotoxic T cell line of claim 6.

1 8. A method of diagnosing cancer in a subject, the
2 method comprising:
3 obtaining a test sample from a subject and
4 determining level of expression of a nucleic acid molecule
5 which encodes Sp17 in the test sample; and
6 comparing the level of expression to level of
7 expression of Sp17 in a control sample from another
8 subject known not to have cancer;
9 wherein a greater level of expression in the test
10 sample as compared to the level of expression in the
11 control sample is diagnostic of cancer.

1 9. The method of claim 8 wherein the level of
2 expression is determined using an antibody specifically
3 immunoreactive with Sp17.

1 10. An immunoconjugate comprising an Sp-17 antigen-
2 binding agent and a therapeutic agent.

1 11. The immunoconjugate of claim 10 wherein the
2 therapeutic agent is selected from the group consisting of
3 an anti-tumor agent, a cytotoxin, a radioactive agent, an
4 antibody, and an enzyme.

1 12. The immunoconjugate of claim 10 wherein the Sp-
2 17 antigen-binding agent is provided as a monoclonal
3 antibody specifically immunoreactive with Sp-17.

1 13. A method of treating a subject suffering from
2 cancer characterized by cells having Sp17 on the cell
3 surface, which comprises administering to the subject an
4 effective amount of the immunoconjugate of claim 10 such
5 that the immunoconjugate binds to the Sp17 on the cells'
6 surface via the Sp-17 antigen-binding agent and the
7 therapeutic agent kills the cells, thereby treating the
8 subject.

1 14. A method for selectively killing tumor cells
2 expressing Sp-17, comprising reacting the immunoconjugate
3 of claim 10 with the tumor cells.

1 15. A method for imaging cancer cells characterized
2 by having Sp-17 on the cell surface, comprising
3 administering to a patient a detectably labeled Sp-17
4 antigen-binding agent in an amount effective for binding
5 to Sp-17 present on cells in the patient, and detecting
6 the bound detectably labeled Sp-17 antigen-binding agent,
7 thereby imaging the cancer cells characterized by having
8 Sp-17 on the cell surface.

1 16. The method of claim 15 wherein the detectably
2 labeled Sp-17 antigen-binding agent is a labeled
3 monoclonal antibody specifically immunoreactive with Sp-
4 17.